

Appl. No. : 09/776,383
Filed : 02/02/2001

AMENDMENTS TO THE CLAIMS

1-3. (Cancelled)

4. (Previously presented) A process for preparing an organic silicate polymer having a flexible bridge unit in the network comprising the step of:

reacting the following component (a) with the following component (b) in an organic solvent after addition of water and catalyst:

(a) organosilane of the formula $R^1_m R^2_n SiX_{4-m-n}$ (where each of R^1 and R^2 which may be the same or different, is a non-hydrolysable group selected from hydrogen, alkyl, fluorine-containing alkyl or aryl group; X is a hydrolysable group selected from halide, alkoxy or acyloxy; and m and n are integers of from 0 to 3 satisfying $0 \leq m+n \leq 3$) or a partially hydrolyzed condensate thereof; and

(b) organic bridged silane of the formula $R^3_p Y_{3-p} Si-M-SiR^4_q Z_{3-q}$ (where each of R^1 and R^4 which may be the same or different, is a non-hydrolysable group selected from hydrogen, alkyl, fluorine-containing alkyl, alkenyl or aryl; each of Y and Z which may be the same or different, is a hydrolysable group selected from halide, alkoxy or acyloxy; M is alkylene or arylene group; and p and q are integers of from 0 to 2) or a cyclic oligomer with organic bridge unit (Si-M-Si), wherein the organic bridged silane is synthesized by reacting a silane monomer containing a Si-H with a silane monomer containing aliphatic unsaturated carbon (-CH=CH₂) in the presence of a catalyst.

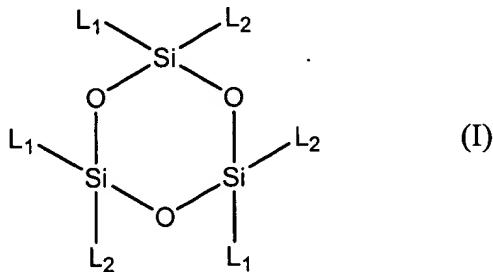
5-6. (Cancelled)

7. (Previously presented) The process according to Claim 4 wherein the organic silicate polymer has a weight average molecular weight of from 500 to 100,000.

8-11. (Cancelled)

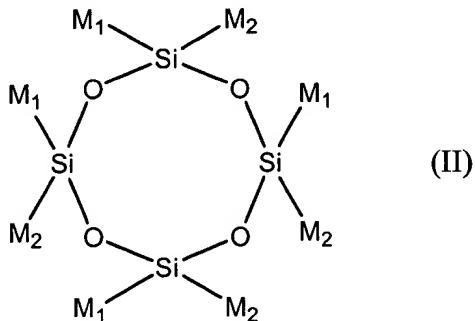
12. (Previously presented) The process according to Claim 4, wherein the partially hydrolyzed condensate of the organosilane is obtained by reacting the organosilane of the formula $R^1_m R^2_n SiX_{4-m-n}$ with water in an organic solvent in the presence of a catalyst.

13. (Previously presented) The process according to Claim 4, wherein the cyclic oligomer with organic bridge unit (Si-M-Si) is synthesized by the hydrosilylation reaction of an oligomer of ring structure (I):



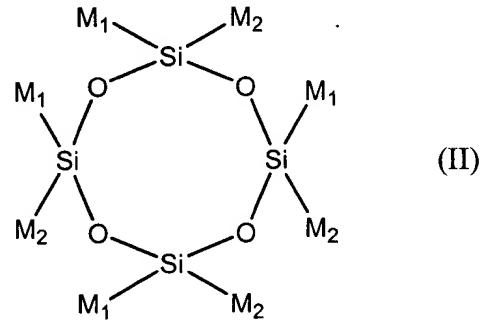
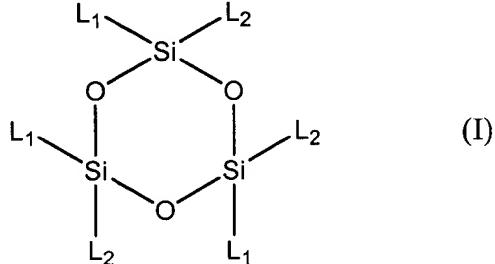
wherein L_1 is alkenyl; and L_2 is selected from the group consisting of hydrogen, alkyl, and aryl.

14. (Currently amended) The process according to Claim 4, wherein the cyclic oligomer with organic bridge unit (Si-M-Si) is synthesized by the hydrosilylation reaction of an oligomer of ring structure (II):



wherein M_2 M_1 is alkenyl; and M_2 is selected from the group consisting of hydrogen, alkyl, and aryl.

15. (Currently amended) The process according to Claim 4, wherein the cyclic oligomer with organic bridge unit (Si-M-Si) is synthesized by the hydrosilylation reaction of an oligomer of ring structure (I) and an oligomer of ring structure (II):



wherein L_1 is alkenyl; L_2 is selected from the group consisting of hydrogen, alkyl, and aryl; M_2 M_1 is alkenyl; and M_2 is selected from the group consisting of hydrogen, alkyl, and aryl.

16. (Previously presented) The process according to Claim 4, wherein an amount of the organic bridged silane reacted with component (a) is greater than 5 parts by weight per 100 parts by weight of component (a).

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17-27. (Cancelled)